

Claims

What is claimed is:

1. A peptide encoded by a polynucleotide sequence wherein said polynucleotide sequence comprises a gene, obtainable from a Group B *Streptococcus*, selected from the group consisting of pho1-13, pho3-21, pho2-15, pho3-18, pho3-22, pho3-3, pho3-17, pho2-2, pho1-5, pho3-1, pho3-23, pho3-50, pho1-14, pho2-10, pho3-14, pho3-24 and pho3-29; or said polynucleotide sequence comprises a homologue or a functional fragment of one of said Group B *Streptococcus* genes.
2. The peptide, according to claim 1, comprising an amino acid sequence selected from the group consisting of SEQ ID NOs. 2, 4, 6, 8, 10, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33 and 35.
3. A polynucleotide wherein said polynucleotide sequence comprises a gene, obtainable from a Group B *Streptococcus*, selected from the group consisting of pho1-13, pho3-21, pho2-15, pho3-18, pho3-22, pho3-3, pho3-17, pho2-2, pho1-5, pho3-1, pho3-23, pho3-50, pho1-14, pho2-10, pho3-14, pho3-24 and pho3-29, obtainable from Group B *Streptococcus*; or said polynucleotide sequence comprises a homologue or a functional fragment of one said Group B *Streptococcus* genes.
4. A polynucleotide which encodes a peptide selected from the group consisting of SEQ ID NOs. 2, 4, 6, 8, 10, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33 and 35.
5. A host transformed to express a peptide encoded by a polynucleotide sequence wherein said polynucleotide sequence comprises a gene, obtainable from a Group B *Streptococcus*, selected from the group consisting of pho1-13, pho3-21, pho2-15, pho3-18, pho3-22, pho3-3, pho3-17, pho2-2, pho1-5, pho3-1, pho3-23, pho3-50, pho1-14, pho2-10, pho3-14, pho3-24 and pho3-29; or said polynucleotide sequence comprises a homologue or a functional fragment of one of said Group B *Streptococcus* genes.

6. The host, according to claim 5, wherein said peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOs. 2, 4, 6, 8, 10, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33 and 35.

7. A vaccine comprising either 1) a peptide encoded by a polynucleotide sequence wherein said polynucleotide sequence comprises a gene, obtainable from a Group B *Streptococcus*, selected from the group consisting of pho1-13, pho3-21, pho2-15, pho3-18, pho3-22, pho3-3, pho3-17, pho2-2, pho1-5, pho3-1, pho3-23, pho3-50, pho1-14, pho2-10, pho3-14, pho3-24 and pho3-29; or said polynucleotide sequence comprises a homologue or a functional fragment of one of said Group B *Streptococcus* genes; or 2) a means for expressing said peptide.

8. The method, according to claim 7, wherein said peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOs. 2, 4, 6, 8, 10, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33 and 35.

9. A method for screening for potential drugs, wherein said method comprises the use of a peptide encoded by a polynucleotide sequence wherein said polynucleotide sequence comprises a gene, obtainable from a Group B *Streptococcus*, selected from the group consisting of pho1-13, pho3-21, pho2-15, pho3-18, pho3-22, pho3-3, pho3-17, pho2-2, pho1-5, pho3-1, pho3-23, pho3-50, pho1-14, pho2-10, pho3-14, pho3-24 and pho3-29; or said polynucleotide sequence comprises a homologue or a functional fragment of one of said Group B *Streptococcus* genes.

10. The method, according to claim 9, wherein said peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOs. 2, 4, 6, 8, 10, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33 and 35.

11. A method for the detection of virulence, wherein said method comprises the use of a peptide encoded by a polynucleotide sequence wherein said polynucleotide sequence comprises

a gene, obtainable from a Group B *Streptococcus*, selected from the group consisting of pho1-13, pho3-21, pho2-15, pho3-18, pho3-22, pho3-3, pho3-17, pho2-2, pho1-5, pho3-1, pho3-23, pho3-50, pho1-14, pho2-10, pho3-14, pho3-24 and pho3-29; or said polynucleotide sequence comprises a homologue or a functional fragment of one of said Group B *Streptococcus* genes.

12. The method, according to claim 11, wherein said peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOs. 2, 4, 6, 8, 10, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33 and 35.

13. A method for the treatment or prevention of a condition associated with bacterial infection, wherein said method comprises administering to a patient in need of such treatment or prevention, an effective amount of a peptide encoded by a polynucleotide sequence wherein said polynucleotide sequence comprises a gene, obtainable from a Group B *Streptococcus*, selected from the group consisting of pho1-13, pho3-21, pho2-15, pho3-18, pho3-22, pho3-3, pho3-17, pho2-2, pho1-5, pho3-1, pho3-23, pho3-50, pho1-14, pho2-10, pho3-14, pho3-24 and pho3-29; or said polynucleotide sequence comprises a homologue or a functional fragment of one of said Group B *Streptococcus* genes.

14. The method, according to claim 13, wherein said peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOs. 2, 4, 6, 8, 10, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33 and 35.

15. The method, according to claim 13, wherein the infection is a Group B *Streptococcal* infection.

16. The method, according to claim 13, wherein the infection is a local infection.

17. The method, according to claim 13, wherein the infection is a urinary tract infection.

18. An antibody raised against a peptide encoded by a polynucleotide sequence wherein said polynucleotide sequence comprises a gene, obtainable from a Group B *Streptococcus*, selected from the group consisting of pho1-13, pho3-21, pho2-15, pho3-18, pho3-22, pho3-3, pho3-17, pho2-2, pho1-5, pho3-1, pho3-23, pho3-50, pho1-14, pho2-10, pho3-14, pho3-24 and pho3-29; or said polynucleotide sequence comprises a homologue or a functional fragment of one of said Group B *Streptococcus* genes.

19. The antibody, according to claim 18, wherein said peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOs. 2, 4, 6, 8, 10, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33 and 35.